

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

The specification is amended by the present response to correct for a minor informality.

Substitute replacement sheets are submitted herein for each of Figures 1 and 9A in which each of those figures is now labeled as "PRIOR ART", as requested on page 2 of the Office Action.

Claims 1-14 are pending in this application. Claims 1-14 were rejected under 35 U.S.C. § 102(b) as anticipated by JP 4-160739 to Fujiwara et al. (herein "Fujiwara").

Addressing the rejection of Claims 1-14 under 35 U.S.C. § 102(b) as anticipated by Fujiwara, that rejection is traversed by the present response.

With respect to independent Claim 1, applicants submit that Fujiwara does not disclose or suggest the specific features directed to the "main lens section" recited therein. Specifically, independent Claim 1 positively recites:

the main lens section includes an electric field lens acting commonly on the electron beams on a focus region side of the main lens section, which is formed by the focus electrode and said at least one intermediate electrode, and a plurality of electric field lenses acting respectively on the electron beams on a divergence region side of the main lens section, which is formed by said at least one intermediate electrode and the anode.

With respect to Figure 8 in the present specification as a non-limiting example, the main lens section includes an electric field lens L1 acting commonly on the electron beams on a focus region side of the main lens section, and a plurality of electric field lenses L2 acting respectively on the electron beams on a divergence region side of the main lens section. In particular, the electric field lens L1 on the focus region side is formed by the focus electrode and at least one intermediate electrode. With such a structure benefits as noted in the present specification at page 22, lines 3-17, can be achieved, and specifically an

axial potential distribution can be made gentler, it becomes possible to obtain a large-diameter main lens in which the axial potential distribution gradually increases, and thereby a large-diameter lens with a less aberration component can be realized.

Further, the above-noted structure positively recited in Claim 1 is believed to clearly distinguish over the teachings in Fujiwara.

In Fujiwara, as shown in Figure 4(a) therein, the end surface at the side of element Gm1 of G5, which structure is the main lens section, includes a plurality of electron beam passage holes 27a, 27b, 27c that individually pass the electron beams. Accordingly, the electric field, which penetrates the electron beam passage holes of G5 from the side of Gm1, forms an electric field lens that individually operates for the three electron beams and that has a small radius of curvature.

In other words, in contrast to Claim 1, the structure disclosed in Fujiwara does not include an electric field lens that acts commonly on electron beams on the focus region side of a main lens section. In such ways, independent Claim 1, and the claims dependent therefrom, are believed to clearly distinguish over the teachings in Fujiwara.

Applicants also note that dependent Claim 2 is believed to even further distinguish over the teachings in Fujiwara. Dependent Claim 2 further recites:

...wherein said focus electrode and said at least one intermediate electrode have, at their mutually opposing faces, outer peripheral electrodes defining opening portions which commonly pass the electron beams.

Again with respect to Figure 8 as a non-limiting example, outer peripheral electrodes G6A are at mutually opposing faces at the side of the intermediate electrode GM1 of the focus electrode G6, and further the outer peripheral electrodes G6A are at mutually opposing faces at the side of the focus electrode G6 of the intermediate electrode GM1A.

In contrast to the structure further recited in dependent Claim 2, Fujiwara is not provided with any outer peripheral electrodes that form an aperture that commonly passes a

plurality of electron beams to the end surface located at the side of the intermediate electrode Gm1 of the focus electrode G5. Thus, Claim 2 even further distinguishes over the teachings of Fujiwara.

With respect to independent Claim 11, independent Claim 11 positively recites features also believed to be neither taught nor suggested by Fujiwara. Specifically, independent Claim 11 recites:

said focus electrode has, in a face thereof opposed to the intermediate electrode disposed adjacent to the focus electrode, an electron beam passage hole which commonly passes the electron beams, and
said anode has, in a face thereof opposed to the intermediate electrode disposed adjacent to the anode, a plurality of electron beam passage holes which individually pass the electron beams.

According to such a feature, and again with reference to Figure 8 as a non-limiting example, the focus electrode G6 has an electron beam passage hole, which commonly passes the electron beams, at the face opposed to the intermediate electrodes GM1 disposed adjacent to the focus electrode G6, and the anode G7 has a plurality of electron beam passage holes that individually pass the electron beams to the face opposed to the intermediate electrode GM2 disposed adjacent to the anode G7.

In contrast to Claim 11, Fujiwara does not include an electron beam passage hole that commonly passes electron beams to the end surface located at the side of the intermediate electrodes Gm1 of the focus electrode G5. Thus, Claim 11, and the claims dependent therefrom, also distinguish over the teachings of Fujiwara.

Applicants also note that Claim 12, which is dependent on Claim 11, even further distinguishes over the applied art.

According to Claim 12, and with reference again to Figure 8 in the present specification as a non-limiting example, an intermediate electrode GM1 opposed to the focus electrode G6 includes, at the face opposed to the focus electrode, an electron beam passage hole that commonly passes the electron beams, and the intermediate electrode GM2

interposed opposed to the anode G7 includes, at the face opposed to the anode, a plurality of electron beam passage holes that individually pass the electron beams. In other words, on the focus region side of the main lens section, the electron beam passage hole of GM1 is opposed to the electron beam passage hole of G5, and on the divergence region side of the main lens section, the electron beam passage holes of GM2 are opposed to the electron beam passage holes of G7, respectively.

In contrast to the further features in Claim 12, in Fujiwara on the focus region side of the main lens section, the electron beam passage holes of the focus electrode G5 are opposed to the electron beam passage holes of the intermediate electrode Gm1, which structure differs from the features in Claim 12 noted above.

Thus, Claim 12 even further distinguishes over the applied art.

In such ways, applicants submit that each of independent Claims 1 and 11, and the claims dependent therefrom, clearly distinguish over the teachings of Fujiwara.

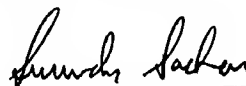
As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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